

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				ATTY. DOCKET NO.		SERIAL NO.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				45-35		09/833,078	
(Use several sheets If necessary)				APPLICANT			
				Thompson et al.			
				FILING DATE		GROUP	
				April 12, 2001		2811	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPLICABLE	
FOREIGN PATENT DOCUMENTS							
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
G.J. Letal, D.A. Thompson, B.J. Robinson, J.G. Simmons, (2001), "Demonstration of a DFB laser with an integrated electro-absorption modulator produced using a novel quantum-well intermixing technique", Materials Science and Engineering, B80, pp. 232-235. <i>WSL</i>							
A.S.W. Lee, D.A. Thompson, B.J. Robinson, (2000), "Enhanced bandgap blue-shift in InGaAsP multiple-quantum-well laser structures by low-temperature-grown InP", Semicond. Sci. Technol., 15, L41-43. <i>WSL</i>							
A.S.W. Lee, M. Mackenzie, D.A. Thompson, J. Bursik, B.J. Robinson, and G.C. Weatherly, (2001), "Enhanced band-gap blueshift due to group V intermixing in InGaAsP multiple quantum well laser structures induced by low temperature grown InP", Applied Physics Letters, Vol.78, No. 21, pp. 3199 - 3201. <i>WSL</i>							
T. Yin, G.J. Letal, B.J. Robinson, D.A. Thompson, (2001), "The Effects of InP Grown by He-Plasma Assisted Epitaxy on Quantum Well Intermixing", Journal of Quantum Electronics, Vol. 37, pp. 426-429. <i>WSL</i>							
D.A. Thompson, J.F. Hazell, A.S.W. Lee, T. Yin, G.J. Letal, B.J. Robinson, N. Bertsch and J.G. Simmons, (2000), "New methods of defect-enhanced quantum well intermixing and demonstrated integrated distributed feedback laser-modulator", Proc. Spie, 4078, pp. 148-162. <i>WSL</i>							
J.E. Haysom, P.J. Poole, R.L. Williams, S. Raymond, G.C. Ayers, (2000), "Diffusion of defects in InP studied using quantum well intermixing", Solid State Communications SSC5429, pp. 1-4. <i>WSL</i>							
J.E. Haysom, P.J. Poole, G.C. Ayers, S.J. Rolfe, S. Raymond, I.V. Mitchell, S. Charbonneau, (2000), "Quantum Well Intermixing Caused By Non-Stoichiometric INP", IPRM 2000 - InP and Related Materials Conference, May 14-18, pp. 56-59. <i>WSL</i>							
H. Pinkney, D.A. Thompson, B.J. Robinson, L.Qian, S.D. Benjamin, P.W.E. Smith, (2000), "Growth of novel InP-based materials by He-plasma-assisted epitaxy", Journal of Crystal Growth, 209, pp. 237-241. <i>WSL</i>							
L.Qian, S.D. Benjamin, P.W.E. Smith, B.J. Robinson, D.A. Thompson, (1997), "Picosecond carrier lifetime and large optical nonlinearities in InGaAsP grown by He-plasma-assisted molecular beam epitaxy" Optics Letters, Vol. 22, No. 2, pp. 108-110. <i>WSL</i>							
J.U. Kang, M.Y. Frankel, R.D. Esman, D.A. Thompson, B.J. Robinson, (1998), "InGaAsP grown by He-plasma-assisted molecular beam epitaxy for 1.55 μ m high speed photodetectors", Applied Physics Letters, Vol. 72, No. 11, pp. 1278-1280. <i>WSL</i>							
EXAMINER: <i>[Signature]</i>				DATE CONSIDERED <i>6/24/02</i>			
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L. Qian, S.D. Benjamin, P.W.E. Smith, B.J. Robinson, and D.A. Thompson, (1997), "Subpicosecond carrier lifetime in beryllium-doped InGaAsP grown by He-plasma-assisted molecular beam epitaxy", Applied Physics Letters 71(11), pp. 1513-1515. <i>WSL</i>							
J.U. Kang, M.Y. Frankel, R.D. Esman, D.A. Thompson, B.J. Robinson, (1998), "Dependence of carrier lifetime and resistivity on annealing in InP grown by He-plasma-assisted molecular beam epitaxy", Journal of Applied Physics, Vol. 83, No. 6, pp. 3423-3425. <i>WSL</i>							
L. Qian, P.W.E. Smith, M.A. Matin, H. Pinkney, B.J. Robinson, and D.A. Thompson, (2000), "Ultrafast carrier dynamics in InGaAsP grown by He-plasma-assisted epitaxy", Optics Communications, Vol. 185, pp. 487-492. <i>WSL</i>							
L. Qian, P.W.E. Smith, B.J. Robinson, D.A. Thompson, (2001), "An ultrafast all-optical asymmetric Fabry-Perot switch based on bulk Be-doped InGaAsP grown by He-plasma-assisted epitaxy", Opt. Quantum Electron. Special Issue on Components for Ultrafast Communications. <i>WSL</i>							
H. Pinkney, D.A. Thompson, B.J. Robinson, P. Mascher, P.J. Simpson, U. Myler, J.U. Kang and M.Y. Frankel, (1998), "Characterization of annealed high-resistivity InP grown by He-plasma-assisted epitaxy", J. Vac. Sci. Technology A 16(2), pp. 772-775. <i>WSL</i>							
H. Pinkney, D.A. Thompson, B.J. Robinson, P.J. Simpson, U. Myler, R.W. Streater, (1999), "Characterization of He-Plasma-Assisted GSMBE InGaAsP", IEEE Publication 99CH36362, pp. 143-146. <i>WSL</i>							
L. Qian, S.D. Benjamin, P.W.E. Smith, B.J. Robinson, D.A. Thompson, (1999), "Dual-wavelength pump probe measurements on helium-plasma-grown InGaAsP reveal complex carrier dynamics", Conf. On Lasers & Electrophysics, CLEO '99. <i>WSL</i>							
D.B. Mitchell, B.J. Robinson, D.A. Thompson, L. Qian, S.D. Benjamin, P.W.E. Smith, (1996), "He-plasma assisted epitaxy for highly resistive, optically fast InP-based materials", Appl. Phys. Lett. 69 (4), pp. 509-511. <i>WSL</i>							
J.S. Tsang, C.P. Lee, S.H. Lee, K.L. Tsai, C.M. Tsai and J.C. Fan; "Compositional Disordering of InGaAs/GaAs heterostructures by low-temperature-grown GaAs Layers", J. Appl. Phys., 79(2), pp. 664-670. <i>WSL</i>							
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115354.00116SERIAL NO.
09/833,078 (Conf. No. 1456)**LIST OF REFERENCES
CITED BY APPLICANT**

APPLICANT David A. Thompson et al

FILING DATE
April 12, 2001GROUP
2811**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOC. NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
WSL	AA	6,027,989	Feb. 22, 2000	Poole et al.			
	AB	5,915,165	Jun. 22, 1999	Sun et al.			
	AC	5,882,951	Mar. 16, 1999	Bhat			
	AD	5,843,802	Dec. 1, 1998	Beernink et al.			
	AE	5,771,256	Jun. 23, 1998	Bhat			
	AF	5,766,981	Jun. 16, 1998	Thornton et al.			
	AG	5,708,674	Jan. 13, 1998	Beernink et al.			
	AH	5,707,890	Jan. 13, 1998	Emery et al.			
	AI	5,608,753	Mar. 4, 1997	Paoli et al.			
	AJ	5,574,745	Nov. 12, 1996	Paoli et al.			
	AK	5,539,763	Jul. 23, 1996	Takemi et al.			
	AL	5,455,429	Oct. 3, 1995	Paoli et al.			
	AM	5,425,043	Jun. 13, 1995	Holonyak, Jr. et al.			
	AN	5,395,793	Mar. 7, 1995	Charbonneau et al.			
	AO	5,353,295	Oct. 4, 1994	Holonyak, Jr. et al.			
	AP	5,298,454	Mar. 29, 1994	D'Asaro et al.			
	AQ	4,871,690	Oct. 3, 1989	Holonyak, Jr. et al.			
	AR	4,805,179	Feb. 14, 1989	Harder et al.			
	AS						

FOREIGN PATENT DOCUMENTS

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	AU				<input type="checkbox"/>	<input type="checkbox"/>
	AV				<input type="checkbox"/>	<input type="checkbox"/>

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

WSL	AW	Journal of Crystal Growth (2000), "Growth of novel InP-based materials by He-plasma-assisted epitaxy," Authors: Pinkney et al.; Pages 237-241
	AX	J. Vac. Sci. Technol. A 16(2), Mar/Apr 1998, "Characterization of annealed high-resistivity InP grown by He-plasma-assisted epitaxy," Authors: Pinkney et al.; Pages 772-775
	AY	J. Vac. Sci. Technol. A 16(2), Mar/Apr 1998, "Quantum well intermixing in material systems for 1.5 μ m (invited)," Authors: Marsh et al.; Pages 810-816
	AZ	IEEE Photonics Technology Letters, Vol. 8, No. 9, September 1996, "10 Gb/s Wavelength Conversion with Integrated Multiquantum-Well-Based 3-Port Mach-Zehnder Interferometer," Authors: Idler et al.; Pages 1163-1165
	BB	J. Appl. Phys. 79(2), 15 January 1996, "Compositional disordering of InGaAs/GaAs heterostructures by low-temperature-grown GaAs layers," Authors: Tsang et al.; Pages 664-670
	BC	IEEE Photonics Technology Letters, Vol. 7, No. 9, September 1995, "Monolithic Integration of InGaAsP-InP Stratified-Layer Distributed Feedback Laser and External Modulator by Selective Quantum-Well Interdiffusion," Authors: Ramdane et al.; Pages 1016-1018
	BD	"Quantum Well Intermixing Caused By Non-Stoichiometric INP," Authors: Haysom et al.; Pages 56-59

Examiner

Date Considered

6/24/02

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